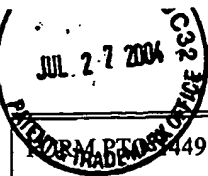


5/16/06

Sheet 1 of 2

FORM PTO-1449		U.S. Department of Commerce Patent and Trademark Office		Atty. Docket No.		Application No. 10/710,608	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)				Applicant Kangguo CHENG et al.			
				Filing Date 07/23/2004		Group 2812	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
mm		US 2002/0063292 A1	5-30-2002	Armstrong et al.			
		US 2003/0032261 A1	2-13-2003	Yeh et al.			
		US 2003/0040158 A1	2-27-2003	Saitoh			
		US 2004/0238914 A1	12-2-2004	Deshpande et al.			
		US 2004/0262784 A1	12-30-2004	Doris et al.			
		US 2005/0040460 A1	2-24-2005	Chidambarrao et al.			
		US 2005/0082634 A1	4-21-2005	Doris et al.			
		US 2005/0093030 A1	5-5-2005	Doris et al.			
		US 2005/0098829 A1	5-12-2005	Doris et al.			
		US 2005/0106799 A1	5-19-2005	Doris et al.			
		US 2005/0145954 A1	7-7-2005	Zhu et al.			
		US 2005/0148146 A1	7-7-2005	Doris et al.			
		US 2005/0194699 A1	9-8-2005	Belyansky et al.			
		US 2005/0236668 A1	10-27-2005	Zhu et al.			
		US 2005/0245017 A1	11-3-2005	Belyansky et al.			
		US 2005/0280051 A1	12-22-2005	Chidambarrao et al.			
		US 2005/0282325 A1	12-22-2005	Belyansky et al.			
		US 2006/0027868 A1	2-9-2006	Doris et al.			
		US 2006/0057787 A1	3-16-2006	Doris et al.			
		US 2006/0060925 A1	3-23-2006	Doris et al.			
		6,483,171	11-19-2002	Forbes et al.			
		6,831,292	12-14-2004	Currie et al.			
		6,717,216	4-6-2004	Doris et al.			
		6,825,529	11-30-2004	Chidambarrao et al.			
		7,015,082	3-21-2006	Doris et al.			
	6,974,981	12-13-2005	Chidambarrao et al.				
mm		6,977,194	12-20-2005	Belyansky et al.			
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
mm		JP 64-76755	3-22-1989	Japan			X
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
EXAMINER mm				DATE CONSIDERED 11/9/06			
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

FORM PTO-1449		U.S. Department of Commerce Patent and Trademark Office		Atty. Docket No.		Application No.	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)				Applicant			
				Filing Date		Group	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
		G. Zhang, et al., "A New 'Mixed-Mode' Reliability Degradation Mechanism in Advanced Si and SiGe Bipolar Transistors." IEEE Transactions on Electron Devices, vol. 49, no. 12, December 2002, pp. 2151-56.					
		H.S. Momose, et al., "Temperature Dependence of Emitter-Base Reverse Stress Degradation and its Mechanism Analyzed by MOS Structures." 1989 IEEE, Paper 6.2, pp. 140-143.					
		C.J. Huang, et al., "Temperature Dependence and Post-Stress Recovery of Hot Electron Degradation Effects in Bipolar Transistors." IEEE 1991, Bipolar Circuits and Technology Meeting 7.5, pp. 170-173.					
		S.R. Sheng, et al., "Degradation and Recovery of SiGe HBTs Following Radiation and Hot-Carrier Stressing" pp. 14-15.					
		Z. Yang, et al., "Avalanche Current Induced Hot Carrier Degradation in 200 GHz SiGe Heterojunction Bipolar Transistors." pp. 1-5.					
		H. Li, et al., "Design of W-Band VCOs with High Output Power for Potential Application in 77 GHz Automotive Radar Systems." 2003, IEEE GaAs Digest, pp. 263-66.					
		H. Wurzer, et al., "Annealing of Degraded non-Transistors-Mechanisms and Modeling." IEEE Transactions on Electron Devices, vol. 41, no. 4, April 1994, pp. 533-38.					
		B. Doyle, et al., "Recovery of Hot-Carrier Damage in Reoxidized Nitrided Oxide MOSFETs." IEEE Electron Device Letters, vol. 13, no. 1, January 1992, pp. 38-40					
		H.S. Momose, et al. "Analysis of the Temperature Dependence of Hot-Carrier-Induced Degradation in Bipolar Transistors for Bi-CMOS." IEEE Transactions on Electron Devices, vol. 41, no. 6, June 1994, pp. 978-987.					
		M. Khater, et al., "SiGe HBT Technology with $F_{max}/F_t = 350/300$ GHz and Gate Delay Below 3.3 ps". 2004 IEEE, 4 pages.					
		J.C. Bean, et al., "GEx Si 1-x/Si Strained-Layer Superlattice Grown by Molecular Beam Epitaxy". J. Vac. Sci. Technol. A 2(2), Apr.-June 1984, pp. 436-440.					
		J.H. Van Der Merwe, "Regular Articles". Journal of Applied Physics, Volume 34, No. 1, January 1963, pp. 117-122.					
		J.W. Matthews, et al., "Defects in Epitaxial Multilayers". Journal of Crystal Growth 27 (1974), pp. 118-125.					
		Subramanian S. Iyer, et al. "Heterojunction Bipolar Transistors Using Si-Ge Alloys". IEEE Transactions on Electron Devices, Vol. 36, No. 10, October 1989, pp. 2043-2064					
		R.H.M. Van De Leur, et al., "Critical Thickness for Pseudomorphic Growth of Si/Ge Alloys and Superlattices". J. Appl. Phys. 64 (6), 15 September 1988, pp. 3043-3050					
		D.C. Houghton, et al., "Equilibrium Critical Thickness for Si 1-x GEx Strained Layers on (100) Si". Appl. Phys. Lett. 56 (5), 29 January 1990, pp. 460-462					
		Q. Quyang et al., "Two-Dimensional Bandgap Engineering in a Novel Si/SiGe pMOSFET with Enhanced Device Performance and Scalability". 2000, IEEE, pp. 151-154.					
EXAMINER				DATE CONSIDERED			
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							



449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT		ATTY. DOCKET NO. FIS920040150US1	SERIAL NO. 10/710,608
(Use several sheets if necessary)		APPLICANT: Kangguo CHENG, <i>et al.</i>	
		FILING DATE: 07/23/2004	GROUP: Unassigned

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

EXAMINER INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPRO.)
M-T	6,228,694 B1	5/8/2001	Doyle et al.			
	6,406,973 B1	6/18/2002	Lee			
	6,281,532 B1	8/28/2001	Doyle et al.			
	5,683,934	11/4/97	Candelaria			
	6,368,931 B1	4/9/2002	Kuhn, et al.			
	5,310,446	5/10/94	Konishi et al.			
	4,853,076	8/1/89	Tsaur et al.			
	US 2002/0090791 A1	7/11/2002	Doyle et al.			
	US 2002/0074598 A1	6/20/2002	Doyle et al.			
	6,509,618 B2	7/21/2003	Jan et al.			
	6,476,462 B2	11/5/2002	Shimizu et al.			
	6,362,082 B1	3/26/2002	Doyle et al.			
	6,228,694 B1	5/8/2001	Doyle et al.			
	5,565,697	10/15/96	Asakawa et al.			
	US 2003/0040158 A1	2/27/2003	Saitoh			
M-T	US 2002/0086472 A1	7/4/2002	Roberds et al.			
	6,521,964 B1	2/18/2003	Jan et al.			
	6,506,652	01/14/03	Jan et al.			

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
					YES	NO

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

EXAMINER		DATE CONSIDERED	11/19/03
----------	--	-----------------	----------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 (Modified)	ATTY. DOCKET NO. FIS920040150US1	SERIAL NO. 10/710,608
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	APPLICANT: Kangguo CHENG, <i>et al.</i>	
(Use several sheets if necessary)	FILING DATE: 07/23/04	GROUP: Unassigned

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

EXAMINER INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPRO.)
MJ	5,081,513	1/14/1992	Jackson, et al.			
	3,602,841	8/31/1971	McGroddy			
	6,531,740	3/11/2003	Bosco, et al.			
	6,531,369	3/11/2003	Ozkan, et al.			
	6,501,121	12/31/2002	Yu, et al.			
	6,498,358	12/24/2002	Lach, et al.			
	6,493,497	12/10/2002	Ramdani, et al.			
	6,403,975	6/11/2002	Brunner, et al.			
	6,361,885	3/26/2002	Chou			
	6,255,169	7/3/2001	Li, et al.			
	6,246,095	6/12/2001	Brady, et al.			
	6,165,383	12/26/2000	Chou			
	6,133,071	10/17/2000	Nagai			
	6,046,464	4/4/2000	Schetzina			
MM	6,025,280	2/15/2000	Brady, et al.			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

--	--	--

EXAMINER	DATE CONSIDERED
<i>AG</i>	11/9/00

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 (Modified)	ATTY. DOCKET NO. FIS920040150US1	SERIAL NO. 10/710,608
	APPLICANT: Kangguo CHENG, <i>et al.</i>	
LIST OF PATENTS AND PUBLICATIONS APPLICANT'S INFORMATION DISCLOSURE STATEMENT	FILING DATE: 07/23/04	GROUP: Unassigned
(Use several sheets if necessary)		

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

EXAMINER INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPRO.)
<i>MA</i>	5,940,736	8/17/1999	Brady, et al.			
	5,880,040	3/9/1999	Sun, et al.			
	5,861,651	1/19/1999	Brasen, et al.			
	5,679,965	10/21/1997	Schetzina			
	5,670,798	9/23/1997	Schetzina			
	5,561,302	10/1/1996	Candelaria			
	5,471,948	12/5/1995	Burroughes, et al.			
	5,459,346	10/17/1995	Asakawa, et al.			
	5,391,510	2/21/1995	Hsu, et al.			
	5,371,399	12/6/1994	Burroughes, et al.			
	5,108,843	4/28/1992	Ohtaka, et al.			
	5,060,030	10/22/1991	Hoke			
	4,958,213	9/18/1990	Eklund, et al.			
<i>MA</i>	4,665,415	5/12/1987	Esaki, et al.			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

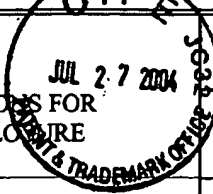
--	--	--

EXAMINER <i>AT 9/20</i>	DATE CONSIDERED <i>11/19/00</i>
----------------------------	------------------------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



FORM PTO-1449 (Modified)		ATTY. DOCKET NO. FIS920040150US1		SERIAL NO. 210/710,608	
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT		APPLICANT: Kangguo CHENG, <i>et al.</i>			
(Use several sheets if necessary)		FILING DATE: 07/23/04		GROUP: Unassigned	
REFERENCE DESIGNATION U.S. PATENT DOCUMENTS					
EXAMINER INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	FILING DATE (IF APPRO.)
[Signature]	5,989,978	11/23/1999	Peidous		
	6,284,626	9/4/2001	Kim		
	6,274,444	8/14/2001	Wang		
	6,261,964	7/17/2001	Wu, et al.		
	6,221,735	4/24/2001	Manley, et al.		
	6,117,722	9/12/2000	Wuu, et al.		
	6,107,143	8/22/2000	Park, et al.		
	6,090,684	7/18/2000	Ishitsuka, et al.		
	6,066,545	5/23/2000	Doshi, et al.		
	6,008,126	12/28/1999	Leedy		
	5,946,559	8/31/1999	Leedy		
	5,840,593	11/24/1998	Leedy		
	5,592,018	1/7/1997	Leedy		
	5,592,007	1/7/1997	Leedy		
	5,571,741	11/5/1996	Leedy		
FOREIGN PATENT DOCUMENTS					
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	TRANSLATION YES NO
OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)					
EXAMINER	[Signature]		DATE CONSIDERED 11/9/04		
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.					

FORM PTO-1449 (Modified)				ATTY. DOCKET NO. FIS920040150US1		SERIAL NO. 10/710,608	
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT							
(Use several sheets if necessary)				FILING DATE: 07/23/04		GROUP: Unassigned	
REFERENCE DESIGNATION U.S. PATENT DOCUMENTS							
EXAMINER INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPRO.)
<i>my</i>		5,557,122	9/17/1996	Shrivastava, et al.			
		5,354,695	10/11/1994	Leedy			
		5,134,085	7/28/1992	Gilgen, et al.			
		5,006,913	4/9/1991	Sugahara, et al.			
		4,952,524	8/28/1990	Lee, et al.			
		4,855,245	8/8/1989	Neppl, et al.			
		2002/0086497	07-04-2002	Kwok			
		5,960,297	09-28-1999	Saki			
		6,403,486	06-11-2002	Lou			
		6,284,623	09-04-2001	Zhang et al.			
		2003/0032261	02-13-2003	Yeh et al.			
		2003/0057184	03-27-2003	Yu et al.			
		6,265,317	07-24-2001	Chiu et al.			
		2003/0067035	04-10-2003	Tews et al.			
		6,461,936	10-08-2002	von Ehrenwall			
		6,319,794	11-20-2001	Akatsu et al.			
<i>mm</i>		2001/0009784	07-26-2001	Ma et al.			
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)							
EXAMINER <i>ABZ</i>				DATE CONSIDERED <i>11/19/06</i>			
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

JUL 27 2004

PAGE 6

Form PTO-1449 (Modified)

LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S
INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Page 1 of 1

Attorney Docket No.:
FIS920040150US1Serial No.:
10/710,608Applicant:
Kangguo CHENG, et al.Filing Date:
07/23/04Group:
Unassigned

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

EXAMINERS INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPRO.)

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

MA		Kern Rim, et al., "Transconductance Enhancement in Deep Submicron Strained-Si <i>n</i> -MOSFETs", International Electron Devices Meeting, 26, 8, 1, IEEE, September 1998.
		Kern Rim, et al., "Characteristics and Device Design of Sub-100 nm Strained Si N- and PMOSFETs", 2002 Symposium On VLSI Technology Digest of Technical Papers, IEEE, pp 98-99.
		Gregory Scott, et al., "NMOS Drive Current Reduction Caused by Transistor Layout and Trench Isolation Induced Stress", International Electron Devices Meeting, 34.4.1, IEEE, September 1999.
		F. Ootsuka, et al., "A Highly Dense, High-Performance 130nm node CMOS Technology for Large Scale System-on-a-Chip Application", International Electron Devices Meeting, 23.5.1, IEEE, April 2000.
		Shinya Ito, et al., "Mechanical Stress Effect of Etch-Stop Nitride and its Impact on Deep Submicron Transistor Design", International Electron Devices Meeting, 10.7.1, IEEE, April 2000.
		A. Shimizu, et al., "Local Mechanical-Stress Control (LMC): A New Technique for CMOS-Performance Enhancement", International Electron Devices Meeting, IEEE, March 2001.
MJ		K. Ota, et al., "Novel Locally Strained Channel Technique for high Performance 55nm CMOS", International Electron Devices Meeting, 2.2.1, IEEE, February 2002.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION

(On several sheets if necessary)

OCT 03 2005

Docket Number (Optional)

FIS920040150US1

Application Number

10/710,608

Applicant(s)

Cheng, et al.

Filing Date

7/23/04

Group Art Unit

2812

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>MM</i>		3,602,841	8-31-71	McGroddy			
		4,665,415	5-12-87	Esaki, et al.			
		4,853,076	8-1-89	Tsaur, et al.			
		4,855,245	8-8-89	Neppl, et al.			
<i>MM</i>		4,952,524	8-28-90	Lee, et al.			

U.S. PATENT APPLICATION PUBLICATIONS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>MM</i>		US 2001/0009784 A1	7-26-01	Ma, et al.			
		US 2002/0063292 A1	5-30-02	Armstrong, et al.			
		US 2002/0074598 A1	6-20-02	Doyle, et al.			
<i>MM</i>		US 2002/0086472	7-4-02	Roberds, et al.			

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
<i>MM</i>		JP64-76755	03-1989	Japan				

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

<i>MM</i>	Kern Rim, et al., "Transconductance Enhancement in Deep Submicron Strained-Si n-MOSFETs". International Electron Devices Meeting, 26, 8, 1, IEEE, September 1998.
<i>MM</i>	Kern Rim, et al., "Characteristics and Device Design of Sub-100 nm Strained Si N- and PMOSFETs." 2002 Symposium on VLSI Technology Digest of Technical Papers, IEEE, pp. 98-99.

EXAMINER

TSV

DATE CONSIDERED

11/7/00

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Docket Number (Optional)
FIS920040150US1

Application Number
10/710,608

Applicant(s)
Cheng, et al.

Filing Date
7/23/04

Group Art Unit
2812

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
1/9		4,958,213	9-18-90	Eklund, et al.			
1/9		5,006,913	4-9-91	Sugahara, et al.			
1/9		5,060,030	10-22-91	Hoke, et al.			
1/9		5,081,513	1-14-92	Jackson, et al.			
1/9		5,108,843	4-28-92	Ohtaka, et al.			

U.S. PATENT APPLICATION PUBLICATIONS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
1/9		US 2002/0086497 A1	7-4-02	Kwok			
1/9		US 2002/0090791 A1	7-11-02	Doyle, et al.			
1/9		US 2003/0032261 A1	2-13-03	Yeh, et al.			
1/9		US 2003/0040158 A1	2-27-03	Saitoh			

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

1/9	Gregory Scott, et al., "NMOS Drive Current Reduction Caused by Transistor Layout and Trench Isolation Induced Stress." International Electron Devices Meeting, 34.4.1, IEEE, September 1999.
1/9	F. Ootsuka, et al., "A Highly Dense, High-Performance 130nm Node CMOS Technology for Large Scale System-on-a-Chip Application." International Electron Devices Meeting, 23.5.1, IEEE, April 2000.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>	Docket Number (Optional) FIS920040150US1	Application Number 10/710,608
	Applicant(s) Cheng, et al.	
	Filing Date 7/23/04	Group Art Unit 2812

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
mm		5,134,085	7-28-92	Gilgen, et al.			
		5,310,446	5-10-94	Konishi, et al.			
		5,354,695	10-11-94	Leedy			
		5,371,399	12-6-94	Burroughes, et al.			
mm		5,391,510	2-21-95	Hsu, et al.			

U.S. PATENT APPLICATION PUBLICATIONS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
mm		US 2003/0057184 A1	3-27-03	Yu, et al.			
mm		US 2003/0067035 A1	4-10-03	Tews, et al.			

FOREIGN PATENT DOCUMENTS

REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

mm		Shinya Ito, et al., "Mechanical Stress Effect of Etch-Stop Nitride and Its Impact on Deep Submicron Transistor Design." International Electron Devices Meeting, 10.7.1, IEEE, April 2000.
mm		A. Shimizu, et al., "Local Mechanical-Stress Control (LMC): A New Technique for CMOS-Performance Enhancement." International Electron Devices Meeting, IEEE, March 2001.

EXAMINER [Signature]	DATE CONSIDERED 11/9/00
-----------------------------------------------------------------	--------------------------------------------------------------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)
FIS920040150US1

Application Number
10/710,608

Applicant(s)
Cheng, et al.

Filing Date
7/23/04

Group Art Unit
2812

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
M		5,459,346	10-17-95	Asakawa, et al.			
		5,471,948	12-5-95	Burroughes, et al.			
		5,557,122	9-17-96	Shrivastava, et al.			
		5,561,302	10-1-96	Candelaria			
M		5,565,697	10-15-96	Asakawa, et al.			

U.S. PATENT APPLICATION PUBLICATIONS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

M		K. Ota, et al., "Novel Locally Strained Channel Technique for High Performance 55nm CMOS." International Electron Devices Meeting, 2.2.1, IEEE, February 2002.
M		G. Zhang, et al., "A New 'Mixed-Mode' Reliability Degradation Mechanism in Advanced Si and SiGe Bipolar Transistors." IEEE Transactions on Electron Devices, vol. 49, no. 12, December 2002, pp. 2151-56.

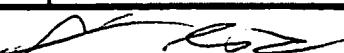
EXAMINER

[Signature]

DATE CONSIDERED

11/9/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>				Docket Number (Optional) FIS920040150US1		Application Number 10/710,608		
				Applicant(s) Cheng, et al.				
				Filing Date 7/23/04		Group Art Unit 2812		
U.S. PATENT DOCUMENTS								
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
MA		5,571,741	11-5-96	Leedy				
		5,592,007	1-7-97	Leedy				
		5,592,018	1-7-97	Leedy				
		5,670,798	9-23-97	Schetzina				
MA		5,679,965	10-21-97	Schetzina				
U.S. PATENT APPLICATION PUBLICATIONS								
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
FOREIGN PATENT DOCUMENTS								
	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>								
MA		H.S. Momose, et al., "Temperature Dependence of Emitter-Base Reverse Stress Degradation and its Mechanism Analyzed by MOS Structures." Paper 6.2, pp. 140-143.						
MA		C.J. Huang, et al., "Temperature Dependence and Post-Stress Recovery of Hot Electron Degradation Effects in Bipolar Transistors." IEEE 1991 Bipolar Circuits and Technology Meeting 7.5, pp. 170-173.						
EXAMINER 				DATE CONSIDERED 11/9/05				
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.								

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Docket Number (Optional)
FIS920040150US1

Application Number
10/710,608

Applicant(s)
Cheng, et al.

Filing Date
7/23/04

Group Art Unit
2812

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		5,683,934	11-4-97	Candelaria			
		5,840,593	11-24-98	Leedy			
		5,861,651	1-19-99	Brasen, et al.			
		5,880,040	3-9-99	Sun, et al.			
		5,940,716	8-17-99	Jin, et al.			

U.S. PATENT APPLICATION PUBLICATIONS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		S.R. Sheng, et al., "Degradation and Recovery of SiGe HBTs Following Radiation and Hot-Carrier Stressing." Pp. 14-15.
		Z. Yang, et al., "Avalanche Current Induced Hot Carrier Degradation in 200 GHz SiGe Heterojunction Bipolar Transistors." Pp. 1-5.

EXAMINER	DATE CONSIDERED 11/04/04
----------	--------------------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>				Docket Number (Optional)		Application Number	
				FIS920040150US1		10/710,608	
				Applicant(s) Cheng, et al.			
				Filing Date		Group Art Unit	
				7/23/04		2812	

U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		5,940,736	8-17-99	Brady, et al.			
		5,946,559	8-31-99	Leedy			
		5,960,297	9-28-99	Sald			
		5,989,978	11-23-99	Peldous			
		6,008,126	12-28-99	Leedy			

U.S. PATENT APPLICATION PUBLICATIONS							
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS								
	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO

OTHER DOCUMENTS		(Including Author, Title, Date, Pertinent Pages, Etc.)
		H. Li, et al., "Design of W-Band VCOs with High Output Power for Potential Application in 77 GHz Automotive Radar Systems." 2003 IEEE GaAs Digest, pp. 263-66.
		H. Wurzer, et al., "Annealing of Degraded npn-Transistors- Mechanisms and Modeling." IEEE Transactions on Electron Devices, vol. 41, no. 4, April 1994, pp. 533-38.

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

FIS920040150US1

Application Number

10/710,608

Applicant(s)

Cheng, et al.

Filing Date

7/23/04

Group Art Unit

2812

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REP	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>MM</i>		6,025,280	2-15-00	Brady, et al.			
		6,046,464	4-4-00	Schetzina			
		6,066,545	5-23-00	Doshi, et al.			
		6,090,684	7-18-00	Isbitsuka, et al.			
<i>MM</i>		6,107,143	8-22-00	Park, et al.			

U.S. PATENT APPLICATION PUBLICATIONS

*EXAMINER INITIAL	REP	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

	REP	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

<i>MM</i>		B. Doyle, et al., "Recovery of Hot-Carrier Damage in Reoxidized Nitrided Oxide MOSFETs." IEEE Electron Device Letters, vol. 13, no. 1, January 1992, pp. 38-40.
<i>MM</i>		H.S. Momose, et al., "Analysis of the Temperature Dependence of Hot-Carrier-Induced Degradation in Bipolar Transistors for Bi-CMOS." IEEE Transactions on Electron Devices, vol. 41, no. 6, June 1994, pp. 978-987.



EXAMINER

JSB

DATE CONSIDERED

11/9/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>				Docket Number (Optional)		Application Number		
				FIS920040150US1		10/710,608		
				Applicant(s)				
				Cheng, et al.		Group Art Unit		
				Filing Date		2812		
				7/23/04				
U.S. PATENT DOCUMENTS								
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
MJ		6,117,722	9-12-00	Wuu, et al.				
		6,133,071	10-17-00	Nagai				
		6,165,383	12-26-00	Chou				
		6,221,735	4-24-01	Manley, et al.				
MA		6,228,694	5-8-01	Doyle, et al.				
U.S. PATENT APPLICATION PUBLICATIONS								
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
FOREIGN PATENT DOCUMENTS								
	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>								
MA		M. Khater, et al., "SiGe HBT Technology with Fmax/Ft = 350/300 GHz and Gate Delay Below 3.3 ps". 2004 IEEE, 4 pages.						
MA		J.C. Bean, et al., "GEx Si 1-x/Si Strained-Layer Superlattice Grown by Molecular Beam Epitaxy". J. Vac. Sci. Technol. A 2(2), Apr.-June 1984, pp. 436-440.						
EXAMINER				DATE CONSIDERED				
								
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.								

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)
FIS920040150US1

Application Number
10/710,608

Applicant(s)
Cheng, et al.

Filing Date
7/23/04

Group Art Unit
2812

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
MA		6,246,095	6-12-01	Brady, et al.			
		6,255,169	7-3-01	Li, et al.			
		6,261,964	7-17-01	Wu, et al.			
		6,265,317	7-24-01	Chiu, et al.			
MA		6,274,444	8-14-01	Wang			

U.S. PATENT APPLICATION PUBLICATIONS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

MA	J.H. Van Der Merwe, "Regular Articles". Journal of Applied Physics, Volume 34, No. 1, January 1963, pp. 117-122.
AM	J.W. Matthews, et al., "Defects in Epitaxial Multilayers". Journal of Crystal Growth 27 (1974), pp. 118-125.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Docket Number (Optional)

FIS920040150US1

Application Number

10/710,608

Applicant(s)

Cheng, et al.

Filing Date

7/23/04

Group Art Unit

2812

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		6,281,532	8-28-01	Doyle, et al.			
		6,284,623	9-4-01	Zhang, et al.			
		6,284,626	9-4-01	Kim			
		6,319,794	11-20-01	Akatsu, et al.			
		6,361,885	3-26-02	Chou			

U.S. PATENT APPLICATION PUBLICATIONS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

		Subramanian S. Iyer, et al., "Heterojunction Bipolar Transistors Using Si-Ge Alloys". IEEE Transactions on Electron Devices, Vol. 36, No. 10, October 1989, pp. 2043-2064.
		R.H.M. Van De Leur, et al., "Critical Thickness for Pseudomorphic Growth of Si/Ge Alloys and Superlattices". J. Appl. Phys. 64 (6), 15 September 1988, pp. 3043-3050.

EXAMINER

DATE CONSIDERED

11/9/00

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Docket Number (Optional)
FIS920040150US1


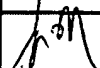
Application Number
10/710,608

Applicant(s)
Cheng, et al.

Filing Date
7/23/04

Group Art Unit
2812

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		6,362,082	3-26-02	Doyle, et al.			
		6,368,931	4-9-02	Kuhn, et al.			
		6,403,486	6-11-02	Lou			
		6,403,975	6-11-02	Brunner, et al.			
		6,406,973	6-18-02	Lee			


U.S. PATENT APPLICATION PUBLICATIONS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		D.C. Houghton, et al., "Equilibrium Critical Thickness for Si 1-x GEx Strained Layers on (100) Si". Appl. Phys. Lett. 56 (5), 29 January 1990, pp. 460-462.

EXAMINER



DATE CONSIDERED

11/14/06

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Docket Number (Optional)

FIS920040150US1

Application Number

10/710,608

Applicant(s)

Cheng, et al.

Filing Date

7/23/04

Group Art Unit

2812

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		6,461,936	10-8-02	von Ehrenwall			
		6,476,462	11-5-02	Shimizu, et al.			
		6,483,171	11-19-02	Forbes, et al.			
		6,493,497	12-10-02	Ramdani, et al.			
		6,498,358	12-24-02	Lach, et al.			

U.S. PATENT APPLICATION PUBLICATIONS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER

DATE CONSIDERED

11/9/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Docket Number (Optional)

FIS920040150US1

Application Number

10/710,608

Applicant(s)

Cheng, et al.

Filing Date

7/23/04

Group Art Unit

2812

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
em		6,501,121	12-31-02	Yu, et al.			
		6,506,652	1-14-03	Jan, et al.			
		6,509,618	1-21-03	Jan, et al.			
		6,521,964	2-18-03	Jan, et al.			
		6,531,369	3-11-03	Ozkan, et al.			

U.S. PATENT APPLICATION PUBLICATIONS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER

[Signature]

DATE CONSIDERED

11/9/00

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Docket Number (Optional)
FIS920040150US1

Application Number
10/710,608

Applicant(s)
Cheng, et al.

Filing Date
7/23/04

Group Art Unit
2812

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
MP		6,531,740	3-11-03	Bosco, et al.			
		6,621,392	9-16-03	Volant, et al.			
		6,635,506	10-21-03	Volant, et al.			
MP		6,831,292	12-14-04	Currie, et al.			

U.S. PATENT APPLICATION PUBLICATIONS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.